NEW SPECIES AND NEW RECORDS OF FISH FROM QUEENSLAND

J. M. Thomson
Department of Zoology, University of Queensland

[Read 26th April, 1967]

Synopsis

Aulopus curtirostris, n. sp. (Aulopidae, Scopeliformes), and *Kanekonia aniara*, n. sp. (Aploactidae, Perciformes), are described and figured, and, together with the shark *Parascyllium collare*, are recorded from Queensland for the first time. The Australian species *Sirembo everriculi* and *Allotaius spariformis* are regarded as synonyms of *S. imberbis* and *Taius tumifrons* from Japanese waters and, together with the shark *Squalus megalops*, are here recorded for the second time from Queensland waters.

The six species recorded in this paper were taken in two hauls of a prawn otter trawl in 35 fathoms of water, approximately 20 miles north-east of Cape Moreton on 16th August, 1966.

ORECTOLOBIDAE

Parascyllium collare Ramsay and Ogilby, 1888

This collared cat shark has not been recorded previously from Queensland. Munro (1956) indicated its distribution as being the waters of Tasmania, Victoria and southern New South Wales. This specimen (T.L. 46·6 cm.) agrees with diagnoses by Whitley (1940) and Munro (1956) except in the details of the colour pattern. Compared with Whitley's figure the present specimen has fewer spots; the lower caudal has three diffuse splotches of black rather than sharply delineated spots; the upper caudal lobe has two black splotches superimposed on the dark brown band and has none of the small spots figured by Whitley; the second dorsal fin has a dark smudge on the lower three-quarters of the anterior edge and a very small black spot just below the tip of the fin; in front of the first dorsal the back is decorated by six median black spots, two of which are superimposed on the brown band running to the base of the ventral fins; the ventrals are marked by only one dark spot instead of the three shown in Whitley's figure (Queensland Museum Reg. No. I.9054).

SQUALIDAE

Squalus megalops Macleay, 1881

About 30 specimens, ranging in size from 12·5 to 28 cm., were taken in a single haul. Previously the species has been reported from Western Australia, Victoria, Tasmania and southern New South Wales (Munro, 1956) and in a single instance from southern Queensland (Ogilvie, 1965).

APLOACTIDAE

Kanekonia aniara, n. sp.

(Fig. 1)

D. X, 14 A III, 11 P. 13 V. I, 2 C. 3, 7, 3 Ll. 11–12

Head length 4·5 and depth 4·1 in total length or respectively 3·8 and 3·2 in length to the hypural. Caudal peduncle 6·0 in depth; eye 5·0, snout 4·0 in head length; interorbital 2·0 in eye. The snout is short, steep-profiled, body

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deepest at the dorsal origin, elongate and tapering posteriorly. Head length less than head depth, snout longer than eye. Interorbital medianly depressed and surrounded by sunken areas bounded by ridges, the depression not triangular in outline, being very similar in appearance to the condition in *Kanekonia queenslandica* Whitley. Maxilla expanded posteriorly, reaching the base of the anterior preopercular spine but not the eye. A prominent symphysial knob on the dentary; tongue deep and keeled anteriorly. A flat band of teeth in each jaw, very small patch on vomer, none on palatine. Gill rakers obsolescent, wider than long, 3/6 on the first arch, the dorsalmost separated by a long gap from the next two which are at the axil; a trace of one or two vestigial rakers below those counted.

The head armed with spines, most of which are blunt and covered by velvety skin; preopercle with 4 marginal spines, the largest dorsalmost; from its base a ridge runs in the direction of the front edge of the pupil, but turns forward before reaching the eye to end in a swollen spine just in front of and a little below the lower edge of the eye; three spines on the preorbital, one pointing slightly posteriorly of ventral, one antero-ventrally and the shortest

Fig. 1. *Kanekonia aniara*, n. sp.

anteriorly; bases of preorbital spines connected by ridges which combine into one ridge running to a swollen protruberance in front of the eye; this protruberance connects via a low ridge with the dorsal preorbital spine, the system of ridges enclosing a depression between the bases of the spines.

Above the eye a slender supraorbital ridge, protruding laterally to overhang the eye in its posterior portion; between the supraorbital ridges a median ridge divides both posteriorly and anteriorly to enclose predorsal and frontal depressions; superior and inferior postorbital ridges in the form of rows of misshapen flat-topped spines; from the base of the anteriormost spine of the inferior postorbital ridge two low ridges run ventrally the anterior to the base of the posteriormost preopercular spine, and the posterior ending ventrally on the operculum at the level of and obscured by the same preopercular spine.

The dorsal fin origin over the posterior third of eye; anal origin opposite origin of soft-rayed part of dorsal; dorsal and anal separate from the broadly-rounded caudal, pectoral origin in line with posterior edge of opercle; ventrals jugal, origin in line with hind edge of pupil; a weak spine and two rays. Fin rays and spines covered by skin, spines pushing through under pressure. The raised tubes marking the lateral line well-spaced, 11 on one side, 12 on the other in the holotype, difficult to locate because skin covering blends with general body colouring.

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Colour (freshly preserved in formalin): to the naked eye a dull metallic blue; under a low-power microscope the background a greyish-white freckled by velvety projections variously coloured dark blue, purple or black, widely spaced on sides, close together between lateral line and dorsal; a cobalt blue suffusion spreads as a small patch about occasional freckles. Fins dusky, ventral spine and first two anal spines buried in white-coloured swollen epidermis.

Holotype: 9·9 cm. total length. Registered number I 9053, Queensland Museum. *Type locality*: 20 miles north-east of Cape Moreton in 35 fathoms.

This species has only 10 dorsal spines instead of the 12 of *K. florida* Tanaka or *K. queenslandica* Whitley, but otherwise is very similar; I can see no point in erecting a monotypic genus on this characteristic. Tanaka's (1918) diagnosis of the genus applies in all other points. Whitley's (1952) description of *K. queenslandica* shows differences in fin counts, which he gives as A, 9 P. 14 and C 3, 11, 2. On examination of the holotype I counted these as A I, 8, P. 14 and C 2, 11, 3. Whitley also gives a ventral fin count of I, 3 but the holotype has I, 2 which is characteristic of the other species. *K. queenslandica* has a lateral line count of 8 or 9; *K. florida* has 9 or 10 and *K. aniara* 11 or 12. Whitley's *K. queenslandica* has the head length equal to the depth; Tanaka's *K. florida* has the depth slightly less than head length whereas *K. aniara* has the depth slightly greater than head length.

AULOPIDAE

Aulopus curtirostris, n. sp.

(Fig. 2)

D. 16 A. 9 P. 11 V. 9 Ll 38(+4–5) tr. 6, 1, 6

Head 4·2, depth 6·5 in total length and respectively 3·4 and 5·2 in length to hypural. Body in front of first dorsal deeper than broad; dorsal anterior profile steep and scalloped; the snout short (5·1 in head), shorter than the eye (3·5 in head); interorbital (2·0 in eye length) flattened between slight supraorbital ridges; nostrils close together near orbit in the postero-ventral corner of a slight preorbital depression; mouth oblique, maxillary expanded posteriorly, reaching past posterior edge of eye; lower jaw entirely included laterally, its symphysis swollen anteriorly into a lobe projecting beyond the premaxillaries.

Lower jaw with an inner row of widely spaced elongate and depressible teeth and 2 to 3 indefinite outer rows of similar shape but smaller size, on the symphysis a small patch of larger teeth; in the upper jaw an inner row of teeth right around the jaw and a second outer row on the anterior half, the outer teeth increasing in size approaching the symphysis; teeth on vomer in flattened arc, about 4 large teeth each side with smaller teeth scattered between them; palatine toothed to well behind angle of jaw, a single row of large teeth being interspersed with smaller irregularly spaced teeth; tongue broadly rounded; gill-rakers long and slender, 4/13 (+2 vestigial) on first gill arch; branchiostegals 12. Hind edge of preopercle almost vertical sharply curved below; opercle more broadly rounded and without a lobe projecting over the pectoral base; interorbital space, snout and opercles without scales. Scales on breast cycloid, elsewhere ctenoid, those below lateral line larger than those above.

Dorsal origin over ventral origin; origin of small adipose second dorsal over the base of the 8th anal ray; 4th ventral ray reaches beyond anus, 3rd reaches anus; outer and inner rays of ventral simple, the others branched.

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Dorsal origin over ventral origin; origin of small adipose second dorsal over the base of the 8th anal ray; 4th ventral ray reaches beyond anus, 3rd reaches anus; outer and inner rays of ventral simple, the others branched.

D_1 origin 3·8 in total length (3·1 in hypural); D_2 origin 1·6 (1·2); interdorsal distance 6·0 (4·8); distance between dorsal origins 2·6 (2·1); ventral origin 3·7 (3·0); anal length 4·1 (3·4); anal origin 1·7 (1·3); anal origin to anus 8·7 (7·0); base of D_1 1·1 in head.

Colour (fresh): silvery below, grey-green above, a series of brown splotches down back and sides; cheeks silvery; eye silvery with a greenish tinge; jaw and interorbital dusky; a marked yellow splash across first dorsal fin, about a third of the fin height anteriorly, curving slowly at first and then more rapidly to the back at the 9th ray; another small yellow patch higher on dorsal between the first two rays; caudal brown at base and at tip of upper lobe; otherwise fins colourless. After some weeks in formalin the yellow fin patches were not visible and the brown on body and caudal had faded. Distinguished from other species of the genus by the number of dorsal rays and the short snout.

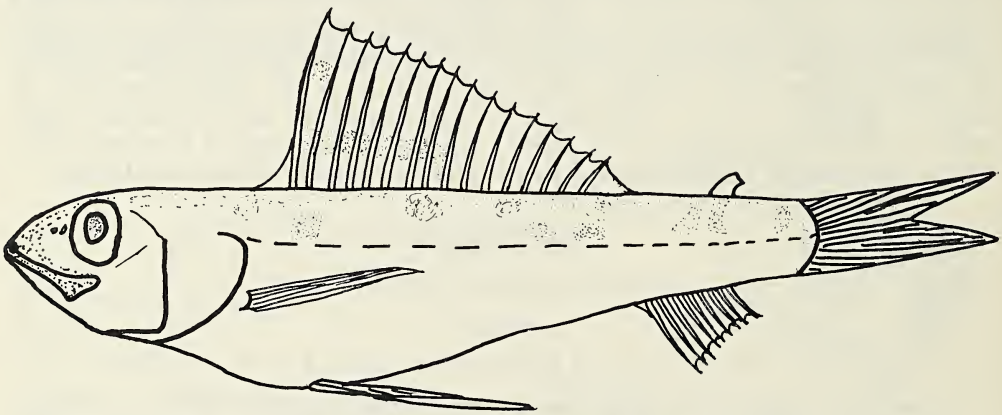

Fig. 2. *Aulopus curtirostris*, n. sp.

Holotype: 12·9 cm. T.L., Queensland Museum Reg. No. I.9051. *Paratype*: 14·0 cm. T.L., Queensland Museum Reg. No. I.9052. *Type locality*: 20 miles north-east of Cape Moreton in 35 fathoms.

The genus *Aulopus* was erected by Cloquet (1816) for a species which occurs in the Mediterranean and the adjacent Atlantic. Richardson (1843) added the Australian species *A. purpurissatus* and from the other side of Australia Cuvier and Valenciennes (1849) added *A. milesii* which has generally been regarded as a synonym of *A. purpurissatus*, though not by Whitley (1931), who erected the genus *Latropiscis* with *milesii* as type species. Whitley stated that "the differences between these two forms" (Atlantic and Australian) "as given by these authors" (i.e., Cuvier and Valenciennes) "seem to be of generic importance". But he did not enumerate the differences, and the only ones that are apparent to me are the number of dorsal fin rays which is greater in the Mediterranean species than in the Australian. This seems to me to be a specific rather than a generic characteristic. *A. curtirostris* has an intermediate number of dorsal spines. Deploring the trend to monospecific genera I refer the present species together with *A. purpurissatus* to the genus *Aulopus*.

BROTULIDAE

Sirembo imberbis Temminck and Schlegel, 1843

Brotula imberbis Temminck and Schlegel, 1843, p. 253, pl. 3, fig. 3; *Sirembo imberbis* Bleeker, 1958, p. 22; *Brotella imberbis* Kaup, 1858, p. 92;

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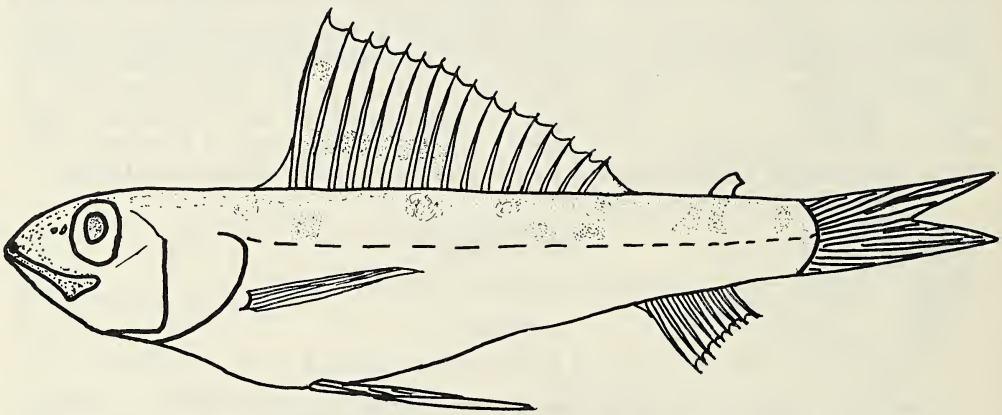

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Sirembo everriculi Whitley, 1936, p. 47, pl. 6, fig. 2, Marshall, 1964, p. 398. Two specimens, 23·1 and 19·6 cm. T.L. (21.4 and 17·9 S.L.), agree with Whitley's (1936) description except that the gill rakers are 1/3 with 2 obsolescent rakers above and 8 below, a count which was confirmed by inspection of the holotype of *S. everriculi* (Australian Museum Reg. No. IA 6564).

In the preserved specimens the rows of golden spots on the body and the golden brown line on the operculum did not show but the narrow pinkish brown band along the lateral line was distinct. As well as the dark anterior blotch described by Whitley the dorsal fin has a second large dark blotch rather less than half way back.

In the collection of the Australian Museum are three specimens of *Sirembo imberbis* from Japan (Australian Museum Reg. No. I 6910). I can detect no differences between these and the Australian specimens.

SPARIDAE

Taius tumifrons Temminck and Schlegel, 1843

Chrysophrys tumifrons Temminck and Schlegel, 1843, p. 70, pl. 34; *Taius tumifrons* Jordan and Thompson, 1912, p. 571, fig. 8; *Dentex spariformis* Ogilby, 1910, p. 91; 1916, p. 169, pl. 21; *Allotaius spariformis* Whitley, 1937, p. 139; 1954, p. 28; Marshall, 1964, p. 205, pl. 36. (For a full synonymy of non-Australian references see Fowler (1933).)

A single haul made by the Endeavour in 1910 produced several specimens of this species. The only record since was that by Whitley (1954) who recorded a specimen from Nambucca Heads. Several other specimens from the coast of New South Wales are in the collection of the Australian Museum. Two dozen small specimens were taken in the two hauls mentioned in the introduction, ranging in size from 5·0 to 9·1 cm. T.L. They accord in all particulars with Ogilby's (1916) description of *Dentex spariformis* except that the gill rakers are 8/13 of which the lowermost two are obsolescent. The description by Jordan and Thompson of *Taius tumifrons* is almost identical with that of *Dentex spariformis* by Ogilby. Fowler (1933) relying on Ogilby's description and figure kept the species separate, keying them apart on the number of rows of cheek scales. But although in his key he places *tumifrons* in a section having "at least 7 or 8 scales above opercle ridge" in his specific description he attributes to *tumifrons* "5 or 6 rows on cheek to opercle flange". Five rows are attributed to *spariformis* by Ogilby. In his specific description of *tumifrons* Fowler gives the coloration as "Back pale to light brown, sides and below white, washed with silvery . . . . Fins pale." Yet in the key he states "Reddish with golden sheen", which accords with the description given by Kishinouye (1901) and with the plate in Anonymous (1931). His duller colour pattern was probably taken from stored material for it accords with the Australian specimens after storage, though when fresh they also are a pinkish-gold colour.

Whitley (1937) differentiated his genus *Allotaius* from *Taius* on the shape of the head and the number of anal rays. The anal ray number is the same being 8 in both species; the bump on the head is not a very convincing generic characteristic as it varies with age and size. In the specimens in the collection of the Australian Museum the smaller specimens have the eye impinging on the profile; in the largest the bump has developed sufficiently for the eye to be well away from the profile line.

Although there are no Japanese specimens available to me it would seem that there is no justification in separating *Allotaius* from *Taius* and no valid reason to separate *T. spariformis* from *T. tumifrons*.

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In the collection of the Australian Museum are three specimens of *Sirembo imberbis* from Japan (Australian Museum Reg. No. I 6910). I can detect no differences between these and the Australian specimens.

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Whitley (1937) differentiated his genus *Allotaius* from *Taius* on the shape of the head and the number of anal rays. The anal ray number is the same being 8 in both species; the bump on the head is not a very convincing generic characteristic as it varies with age and size. In the specimens in the collection of the Australian Museum the smaller specimens have the eye impinging on the profile; in the largest the bump has developed sufficiently for the eye to be well away from the profile line.

Although there are no Japanese specimens available to me it would seem that there is no justification in separating *Allotaius* from *Taius* and no valid reason to separate *T. spariformis* from *T. tumifrons*.

Specimens in the Australian Museum include: I 12538 (*Co-type*) Cape Moreton to Double Island Point; IB 2987 Nambucca Heads; IB 3531 Newcastle; IB 3800-1 Nambucca; IB 5299 N.E. of Coffs Harbour; IB 6452 Northern New South Wales; IB 7315 Mosman Bay.

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